

Serial No. 10/757,753
Reply to Office Action of July 19, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for managing data in a computing system comprising:
 - providing a digital sequence in a computing device;
 - dividing the digital sequence into a plurality of digital sequences;
 - producing a probabilistically unique identifier from each of the plurality of digital sequences by placing each of the plurality of digital sequences through individual hash function operations;
 - comparing said probabilistically unique identifier for each of the plurality of digital sequences to a previously stored list of similarly produced probabilistically unique identifiers with their corresponding to a previously stored list of digital sequences; and
 - maintaining a list of probabilistically unique identifiers based upon the act of comparing.
2. (original) The method of claim 1 further comprising:
 - adding said probabilistically unique identifier to said list if said probabilistically unique identifier is not previously in said list.
3. (original) The method of claim 1 further comprising:
 - removing said probabilistically unique identifier from said list if said probabilistically unique identifier is previously in said list.

Serial No. 10/757,753

Reply to Office Action of July 19, 2005

4. (original) The method of claim 2 further comprising:
adding said digital sequence corresponding to said probabilistically unique identifier to said list.
5. (original) The method of claim 3 further comprising:
removing said digital sequence corresponding to said probabilistically unique identifier from said list.
6. (original) The method of claim 4 further comprising:
adding a correspondence between said digital sequence and said probabilistically unique identifier for that sequence.
7. (Canceled)
8. (original) The method of claim [[7]]1 wherein said step of hashing is carried out by means of an industry standard digest algorithm.
9. (original) The method of claim 8 wherein said step of hashing is carried out by one of an MD4, MD5, SHA or SHA-1 algorithm.
10. (Canceled)
11. (original) The method of claim 1 wherein said digital sequence is descriptive meta data of at least one other digital sequence.
12. (original) The method of claim 1 wherein said digital sequence is descriptive meta data of at least one probabilistically unique identifier.
13. (original) The method of claim 1 wherein said digital sequence describes a method that represents at least one digital sequence.

Serial No. 10/757,753
Reply to Office Action of July 19, 2005

14. (Currently Amended) A method for managing data in a computing system comprising:
- providing a digital sequence in a computing device;
 - dividing the digital sequence into a plurality of shorter digital sequences;
 - and
 - producing probabilistically unique identifiers from each said plurality of shorter digital sequences by placing each of the plurality of digital sequences through individual checksum operations;
 - ~~comparing said probabilistically unique identifiers to a previously stored list of identifiers~~ comparing said probabilistically unique identifier for each of the plurality of shorter digital sequences to similarly produced probabilistically unique identifiers corresponding to a previously stored list of digital sequences; and
 - maintaining a list of probabilistically unique identifiers based upon the act of comparing.
15. (Canceled)
16. (Canceled)
17. (original) The method of claim 14 wherein said step of dividing produces said shorter digital sequences having individually variable lengths.
18. (original) The method of claim 14 wherein said step of dividing is based on the content of said digital sequence.
19. (original) The method of claim 14 wherein said step of dividing is based on meta data describing said digital sequence.
20. (original) The method of claim 14 wherein said step of dividing produces said shorter digital sequences having substantially invariable lengths.

Serial No. 10/757,753

Reply to Office Action of July 19, 2005

21. (Currently Amended) The method of claim 14 wherein said step of producing said ~~[[like]]~~ plurality of probabilistically unique identifiers further comprises:
- individually hashing said shorter digital sequences to produce said ~~[[like]]~~ plurality of probabilistically unique identifiers.
22. (Currently Amended) The method of claim 14 further comprising the step of:
- adding said plurality of shorter digital sequences and said corresponding ~~[[like]]~~ plurality of probabilistically unique identifiers to said list.
23. (Currently Amended) The method of claim 14 further comprising the step of:
- removing said plurality of shorter digital sequences and said corresponding ~~[[like]]~~ plurality of probabilistically unique identifiers from said list.
24. (original) The method of claim 9 further comprising the step of:
- utilizing at least a portion of said probabilistically unique identifier as an indicator to a location in said list for said step of comparing.
25. (Currently Amended) A computer program product comprising:
- a computer usable medium having computer readable code embodied therein for managing data, said computer program product comprising:
- computer readable program code devices configured to cause a computer to effect producing a probabilistically unique identifier from a digital sequence;
- ~~[[and]]~~
- computer readable program code devices configured to cause a computer to effect comparing said probabilistically unique identifier to a ~~previously stored~~

Serial No. 10/757,753

Reply to Office Action of July 19, 2005

list of similarly produced [[other]] probabilistically unique identifiers corresponding to a previously stored list of other digital sequences; and

computer readable program code devices configured to cause a computer to maintain a list of probabilistically unique identifiers based upon the act of comparing.

26. (original) The computer program product of claim 25 further comprising:
computer readable program code devices configured to cause a computer to effect adding said probabilistically unique identifier to said list if said probabilistically unique identifier is not previously in said list.
27. (original) The computer program product of claim 26 further comprising:
computer readable program code devices configured to cause a computer to effect adding said corresponding digital sequence to said list.
28. (original) The computer program product of claim 25 wherein said computer readable program code devices configured to cause said computer to effect producing comprises:
computer readable program code devices configured to cause a computer to effect hashing said digital sequence to produce said probabilistically unique identifier.
29. (original) The computer program product of claim 28 wherein said computer readable program code devices configured to cause a computer to effect hashing is carried out by means of an industry standard digest algorithm.
30. (original) The computer program product of claim 29 wherein said computer readable program code devices configured to cause a computer to effect hashing is carried out by one of an MD4, MD5, SHA or SHA-1 algorithm.

Serial No. 10/757,753

Reply to Office Action of July 19, 2005

31. (original) The computer program product of claim 25 wherein said computer readable program code devices configured to cause a computer to effect producing comprises:

computer readable program code devices configured to cause a computer to effect generating a checksum for said digital sequence to produce said probabilistically unique identifier.

32. (original) The computer program product of claim 25 further comprising: computer readable program code devices configured to cause a computer to effect creating a directory list containing said probabilistically unique identifier for said digital sequence.

33. (original) The computer program product of claim 25 further comprising: computer readable program code devices configured to cause a computer to effect dividing said digital sequence into a plurality of shorter digital sequences; and

computer readable program code devices configured to cause a computer to effect producing a like plurality of probabilistically unique identifiers corresponding to each of said plurality of shorter digital sequences.

34. (original) The computer program product of claim 33 wherein said computer readable program code devices configured to cause a computer to effect dividing produces said shorter digital sequences having individually variable length.

35. (original) The computer program product of claim 33 wherein said computer readable program code devices configured to cause a computer to effect dividing produces said shorter digital sequences having substantially invariable length.

Serial No. 10/757,753
Reply to Office Action of July 19, 2005

36. (original) The computer program product of claim 33 wherein said computer readable program code devices configured to cause a computer to effect producing said like plurality of probabilistically unique identifiers comprises:
computer readable program code devices configured to cause a computer to effect individually hashing said shorter digital sequences to produce said like plurality of probabilistically unique identifiers.
37. (original) The computer program product of claim 33 further comprising:
computer readable program code devices configured to cause a computer to effect adding said plurality of shorter digital sequences and said corresponding like plurality of probabilistically unique identifiers to said list.
38. (original) The computer program product of claim 25 further comprising:
computer readable program code devices configured to cause a computer to effect utilizing at least a portion of said probabilistically unique identifier as an index into a table of locations for said list for said step of comparing.
39. (Canceled)
40. (Canceled)